

REMARKS/ARGUMENTS:

Claim Amendments

Claims 1-12, 14 and 16-18 are currently pending. Claims 1-11 are withdrawn.

Applicant has amended claim 12 to delete the phrase “which is derived from *Bacillus megaterium* cytochrome P450 monooxygenase BM-3 with,” and “with the proviso that, if the enzyme carries mutation F87A, more than one of these regions is mutated.”

Applicant has amended claim 20 to delete the phrase “having an amino acid sequence according to SEQ ID NO:2,” and “wherein, if the enzyme carries mutation F87A, then there exists more than one functional mutation.”

Claim Rejections under 35 U.S.C. § 112, second paragraph

1.) The Examiner rejected Claim 12, 14 and 16-18 under 35 USC § 112, second paragraph, as allegedly indefinite on grounds that the phrase “is derived from *Bacillus megaterium*” was unclear.

Applicant has amended claim 12 to delete the phrase thereby rendering the rejection moot.

2.) The Examiner rejected claim 20 as allegedly indefinite on grounds that the claim recited the phrase “as set forth in.”

Applicant respectfully submits that claim 20 contains no such language. Notwithstanding, Applicant has amended claim 20 to delete the phrase “according to SEQ ID NO: 2” in favor of “having the amino acid sequence of SEQ ID NO:2,” thereby rendering the rejection moot.

3.) The Examiner rejected claim 20 as allegedly indefinite for reciting, “if the enzyme carries mutation F87A, then there exists more than one functional mutation...”

Applicant has amended claim 20 to delete the recited phrase, thereby obviating the

rejection.

Claim Rejections under 35 U.S.C. § 112, first paragraph

The Examiner rejected claims 12, 14, 16-18 and 20 under 35 USC § 112, first paragraph, as failing to comply with the written description and enablement requirements. More specifically, the Examiner indicated that “the Examiner has interpreted the claims broadly to encompass a method of using a polynucleotide encoding mutants of (A) any monooxygenase, including any monooxygenase isolated from any sources and including any or all variants, recombinants, and mutants thereof, or (B) any monooxygenase comprising any fragment of SEQ ID NO:2 (as little as two contiguous amino acids), wherein said mutant of (A) or (B) comprises one or more amino acid mutation/substitution at amino acid positions corresponding to 87, 188 and optionally at positions 26, 47, 72 and 354 of SEQ ID NO:2 and one or more amino acid mutation/substitutions at any other amino acid positions.”

While Applicant does not agree that the Examiner’s interpretation comprises a broadest reasonable interpretation consistent with the specification, Applicant has amended claim 12 to recite “a nucleic acid sequence encoding a monooxygenase having the amino acid sequence of SEQ ID NO:2 and containing one functional mutation in each of amino acid sequence positions 87 and 188.” Applicant has also amended claim 20 to recite, “a vector comprising a nucleic acid sequence encoding a monooxygenase having the amino acid sequence of SEQ ID NO:2, wherein SEQ ID NO:2 contains one functional mutation in each of amino acid sequence positions 87 and 188.”

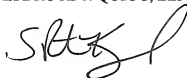
Applicant respectfully submits that claims 12 and 20 describe mutants of SEQ ID NO: 2 obtained by performing specific mutations at two specific positions, i.e., positions 78 and 188, and optional further specific mutations at positions 26, 47, 72, 74 and 354. IN view thereof, Applicant respectfully submits that the amendments of claims 12 and 20 obviate the rejections such that they should be withdrawn.

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Conclusion

Applicants respectfully submit that the present application is in condition for allowance, which action is courteously requested. Please charge any shortage in fees due in connection with the filing of this paper to Deposit Account 14.1437. Please credit any excess fees to such account.

Respectfully submitted,
NOVAK DRUCE & QUIGG, LLP

A handwritten signature in black ink, appearing to read 'S. Peter Konzal', written over the printed name.

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